

LIST OF SUBSTANCES FOR ACCIDENTAL RELEASE PREVENTION

CLEAN AIR ACT section 112(r)



The purpose of the CAA provisions for accident prevention is to ensure that facilities reduce the likelihood and severity of accidental chemical releases that could harm the public and the environment. These provisions also ensure that the public and state

On 31January 1994, EPA promulgated a final rule under provisions of the Clean Air Act (CAA) Amendments s.112(r) for the prevention of accidental releases of hazardous substances. The rule establishes a list of chemicals and threshold quantities that identify facilities subject to subsequent accident prevention regulations. The listed substances have the potential to pose the greatest hazard to public health and the environment in the event of an accidental release. On 15 April 1996, EPA proposed several amendments to the final rule. The list constitutes the first of two necessary elements for the prevention of chemical accidents under EPA's CAA mandate. The second element is the requirement for risk management planning. A facility that handles more than a threshold quantity of a listed substance in a process is subject to the risk management planning requirements of CAA section 112(r).

and local governments can receive facility-specific information on potential hazards and the steps being taken to prevent accidents.

REGULATORY BACKGROUND

In 1986 the Emergency Planning and Community Right-to-Know Act (EPCRA) became law. EPCRA improves the ability of communities to prepare for and respond to chemical accidents. Under EPCRA, communities must develop emergency response plans, based on information that facilities must provide on the hazardous chemicals they handle. In the 1990 amendments to the Clean Air Act, Congress included requirements for accidental release prevention regulations in section 112(r). Congress also mandated that the Occupational Safety and Health Administration (OSHA) adopt a process safety management standard to protect workers from the workplace effects of chemical accidents; the standard was issued on 24 February 1992.

CHARACTERISTICS OF THE FINAL RULE

Under the CAA, EPA must develop an initial list of at least 100 substances that, in the event of an accidental release, could cause death, injury, or serious adverse effects to human health or the environment.

If a facility has more than a threshold quantity of these substances in a process, then it must develop and implement a risk management program. That program must include a hazard assessment, prevention program, and an emergency response program. Summary risk management plans will be submitted to a central location and will be made electronically available to state and local authorities as well as the public. The final rule for risk management planning was promulgated on 20 June 1996.

The statutory criteria EPA considered in selecting substances for the list include severity of acute adverse health effects, likelihood of release, and potential magnitude of human exposure. EPA set threshold quantities for each regulated substance based on its toxicity, reactivity, volatility, dispersibility, and flammability, as well as the amount known or anticipated to cause effects of concern.

The list EPA promulgated in 1994 includes 77 acutely toxic chemicals, 63 flammable gases and volatile flammable liquids, and Division 1.1 high explosive substances as listed by DOT in 49 CFR 172.101. The final rule establishes threshold quantities for toxic substances ranging from 500 to 20,000 pounds. For all listed flammable substances, the threshold quantity is 10,000 pounds, while all explosive substances have a threshold quantity of 5,000 pounds. The rule sets forth the procedures for determining whether a threshold quantity of a regulated substance is present at a stationary source. Specific exemptions to the threshold determination are also included for mixtures, articles, and certain uses and activities. The rule also specifies the requirements for petitions to the Agency to add substances to, or delete substances from, the list.

PROPOSED CHANGES

F ollowing EPA's promulgation of the final list rule, some members of the regulated community raised questions about certain provisions they felt were inconsistent with the intent EPA expressed in the preamble and other documents supporting the final rule. In response, EPA published proposed amendments to the final rule on 15 April 1996.

The first proposed modification would be to delete the category of Division 1.1 explosives. The Agency also proposes to exempt from threshold quantity determinations regulated flammable substances in gasoline used as fuel and in naturally occurring hydrocarbon mixtures prior to initial processing. Further, the Agency proposes clarification of the provision for threshold determination of flammable substances in a mixture. Modifications to the definition of "stationary source" are proposed to clarify the exemption of transportation and storage related to transportation and to clarify that naturally occurring hydrocarbon reservoirs are not stationary sources or parts of stationary sources. In addition, EPA proposes to clarify that 40 CFR part 68 does not apply to sources located

on the Outer Continental Shelf. EPA believes these proposed changes will focus accident prevention more appropriately on stationary sources with high hazard operations and reduce duplication with other similar requirements.

For those provisions of the list rule that EPA is proposing to amend, the Agency has finalized a stay of effectiveness until it takes final action on the proposed modifications. Thus, owners and operators of processes and sources that EPA has proposed not be subject to risk management planning requirements would not have to comply with CAA section 112(r) until EPA has determined whether to finalize the proposed list rule amendments.

AFFECTED UNIVERSE

E PA estimates that approximately 66,000 facilities will be affected by the list and risk management planning rules, if the proposed list amendments are adopted. The facilities include chemical and many other manufacturers, cold storage facilities with ammonia refrigeration systems, public water treatment systems, wholesalers and distributors of these chemicals, propane retailers, utilities, and federal facilities.

CONCLUSION

According to the risk management planning requirements of the Clean Air Act, facilities that handle certain hazardous substances must act to prevent chemical accidents. They must also share information about their prevention efforts with the public, workers, and government. EPA expects these new partnerships among stakeholders in prevention activity to prove a dynamic force in reducing the number and severity of chemical accidents.

FOR MORE INFORMATION...

CONTACT THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW HOTLINE

(800) 424-9346 OR (703) 412-9810 TDD (800) 553-7672

MONDAY-FRIDAY, 9AM TO 6PM, EASTERN TIME

VISIT THE CEPPO HOME PAGE http://www.epa.gov/swercepp/